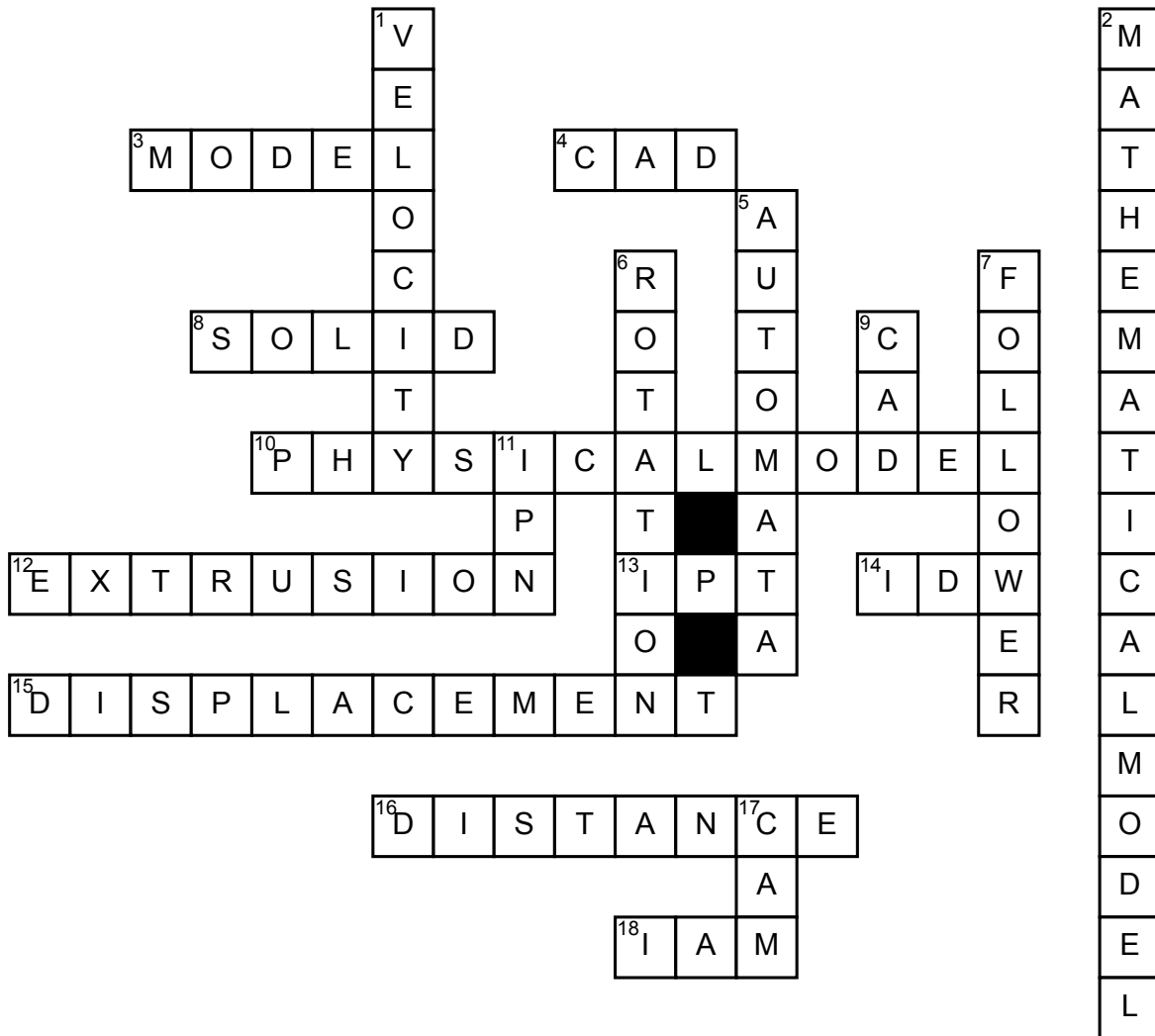


PLTW Unit 4



Across

- 3.** A visual, mathematical, or three-dimensional representation in detail of an object or design, often smaller than the original.
- 4.** When used in the context of design: the use of a computer to assist in the process of designing a part, circuit, building, etc.
- 8.** A three-dimensional body or geometric figure.
- 10.** A physical representation of an object. Prototypes and appearance models are physical models.
- 12.** A manufacturing process that forces material through a shaped opening. 2. A modeling process that creates a three-dimensional form by defining a closed two-dimensional shape and a length.

- 13.** Autodesk Pro file extension for a part

- 14.** Autodesk Pro extension for a drawing.

- 15.** The change in position of an object from its starting position to its final position. Displacement is described by a magnitude and direction. Displacement is a vector quantity.

- 16.** A measure of how far an object has traveled from its starting point regardless of its starting or ending position. Distance is a scalar quantity.

- 18.** Autodesk Pro extension for an assembly

Down

- 1.** The rate with respect to time that an object changes position (regardless of the path taken). Velocity is described by a magnitude and a direction. Velocity is a vector quantity.

- 2.** The process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions.

- 5.** A moving mechanical device that performs a repetitive function.

- 6.** Turning around an axis or center point.

- 7.** A machine part that receives motion from another part.

- 9.** When used in the context of design: the use of a computer to assist in the process of designing a part, circuit, building, etc.

- 11.** Autodesk Pro extension for a presentation.

- 17.** A rotating or sliding part in a mechanism used especially to transform rotational motion to linear motion or vice versa.